

IAP6 Rec'd PCT/PTO 29 MAR 2007

PATENT ATTORNEY DOCKET NO. 50026/061001

Certificate of Mailing: Date of Deposit: March 27, 2007

I hereby certify under 37 C.F.R. § 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Seung Cha

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Makoto INOUE et al.

Confirmation No.:

7683

Serial No.:

10/587,123

Art Unit:

1645

371 (c) Date:

January 18, 2007

Examiner:

Not Yet Assigned

Customer No.:

21559

Title:

METHOD FOR PRODUCING VIRAL VECTORS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REQUEST TO CORRECT NOTICE OF ACCEPTANCE OF APPLICATION

Applicants request that the enclosed Notice of Acceptance of Application be corrected as follows.

Under "The following items have been received:"

Please replace "Information Disclosure Statements Filed on 01/18/2007" with

"Information Disclosure Statements Filed on 02/16/2007."

Enclosed in support of the present request are copies of the following:

- the incorrect Notice of Acceptance of Application; and
- the Information Disclosure Statement (IDS) including a Certificate of Mailing dated February 14, 2007, as printed from the Patent Application Information Retrieval Image File Wrapper and bearing a stamp indicating receipt by the U.S.P.T.O. of the IDS on February 16, 2007.

If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

. Date: 27 North 2007

James D. DeCamp, Ph.D. JAN N. TITTER, Ph.D. Pag No. 43,580 Pag. No. 52,290

Clark & Elbing LLP 101 Federal Street Boston, MA 02110

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Page 1 of 2



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO.

10/587,123 Makoto Inoue 50026/061001

INTERNATIONAL APPLICATION NO.

PCT/JP05/00708

21559 I.A. FILING DATE PRIORITY DATE

CLARK & ELBING LLP 01/20/2005 01/22/2004

21559 CLARK & ELBING LLP 101 FEDERAL STREET BOSTON, MA 02110

CONFIRMATION NO. 7683
371 ACCEPTANCE LETTER

OC000000022886229

Date Mailed: 03/16/2007

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

01/18/2007

01/18/2007

DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS

DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE. The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 07/24/2006
- English Translation of the IA filed on 07/24/2006
- Copy of the International Search Report filed on 07/24/2006
- Preliminary Amendments filed on 07/24/2006
- Information Disclosure Statements filed on 01/18/2007
- Biochemical Sequence Diskette filed on 07/24/2006
- Oath or Declaration filed on 01/18/2007
- Biochemical Sequence Listing filed on 07/24/2006
- Request for Immediate Examination filed on 07/24/2006
- U.S. Basic National Fees filed on 07/24/2006
- Priority Documents filed on 07/24/2006

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Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

LAMONT M HUNTER
Telephone: (703) 308-9140 EXT 201

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/903 (371 Acceptance Notice)

IAP13Rec'd PCT/PTO 1 6 FEB 2007

ATTORNEY DOCKET NO. 50026/061001

Certificate of Mailing: Date of	Deposit: February 14, 2007
I hereby certify under 37 C.F.R. § 1.8(a) that this corr Service as first class mail with sufficient postage on Commissioner for Patents, P.O. Box 1450, Alexandria	espondence is being deposited with the United States Postal the date indicated above and is addressed to Mail Stop PCT, a, VA 22313-1450.
Megan Kiley Printed name of person mailing correspondence	Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Inoue et al.

Confirmation No.: 7683

Serial No.:

10/587,123

Art Unit:

1645

Filed:

July 24, 2006

Examiner:

Not Yet Assigned

Customer No.: 21559

Title:

METHOD FOR PRODUCING VIRAL VECTORS

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the enclosed Form PTO-1449, copies of which are enclosed, with the exception of U.S. patents and U.S. patent application publications. A copy of a search report from a corresponding international application and from a corresponding European application is also enclosed.

Applicants note that WO 97/16539, WO 00/70055, WO 00/70070, WO 03/025570 A1, WO 03/093476 A1 are written in the Japanese language, except for the English language abstract. English language translations of these publications are enclosed.

In addition, Applicants note that Donald et al., "The New Enzymology of Precursor Processing Endoproteases," J. Biol. Chem. 267(33):23435-23438 (1992) listed on the ISR corresponds to Steiner et al., "The New Enzymology of Precursor Processing Endoproteases," J. Biol. Chem. 267(33):23435-23438 (1992) submitted herewith.

Submission of this statement is not a representation that a search has been made, nor is the inclusion of information in this statement an admission that the information is material to patentability.

This statement is being filed before the receipt of a first Office action on the merits.

If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

James D./DeCamp, Ph.D.

Reg. No. 43,580 JAN N. TITTEZ, Ph.D. Pag. No. 52,290

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SUBSTITUTE FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE	Attorney Docket No.	50026/061001
(MODIFIED)	PATENT AND TRADEMARK OFFICE	Serial No.	10/587,123
		Applicant	Inoue et al.
STATEMENT	N DISCLOSURE BY APPLICANT	Filing Date	July 24, 2006
(Use several sheets if necessary)		Group	1645
(37 C.F.R. § 1.98(b))		IDS Filed	February 14, 2007

	U.S. PATENT DOCUMENTS			
Examiner's Initials	Document Number	Publication Date	Patentee or Applicant	
	2002/0169306 A1	Nov. 14, 2002	Kitazato et al.	
	2003/0022376 A1	Jan. 30, 2003	Kitazato et al.	
	2003/0166252 A1	Sep. 4, 2003	Kitazato et al.	
	2003/0170266 A1	Sep. 11, 2003	Kitazato et al.	
	2005/0266566 A1	Dec. 1, 2005	Nagai et al.	
,,	6,645,760	Nov. 11, 2003	Nagai et al.	
	6,723,532	Apr. 20, 2004	Nagai et al.	

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION				
Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Translation (Yes/No)
	EP 0 864 645 A1	Sep. 16, 1998	EPO	
	WO 97/16539 A1	May 9, 1997	WIPO	Yes
	WO 00/70055 A1	Nov. 23, 2000	WIPO	Yes
	WO 00/70070 A1	Nov. 23, 2000	WIPO	Yes
	WO 01/20989 A1	Mar. 29, 2001	WIPO	
	WO 03/025570 A1	Mar. 27, 2003	WIPO	Yes
	WO 03/093476 A1	Nov. 13, 2003	WIPO	Yes

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SUBSTITUTE FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No.	50026/061001
(MODIFIED)		Serial No.	10/587,123
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant	Inoue et al.
		Filing Date	July 24, 2006
		Group	1645
(37 C.F.R. § 1.98(b))		IDS Filed	February 14, 2007

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)
Basak et al., "Implication of the Proprotein Convertases Furin, PC5 and PC7 in the Cleavage of Surface Glycoproteins of Hong Kong, Ebola and Respiratory Syncytial Viruses: A Comparative Analysis With Fluorogenic Peptides," <i>Biochem. J.</i> 353(Pt3):537-545 (2001).
Berglund et al., "Semliki Forest Virus Expression System: Production of Conditionally Infectious Recombinant Particles," <i>Biotechnology (NY)</i> 11(8):916-920 (1993).
Biacchesi et al., "Modification of the Trypsin-Dependent Cleavage Activation Site of the Human Metapneumovirus Fusion Protein to be Trypsin Independent Does Not Increase Replication or Spread in Rodents or Nonhuman Primates," <i>J. Virol.</i> 80(12):5798-5806 (2006).
González-Reyes et al., "Cleavage of the Human Respiratory Syncytial Virus Fusion Protein at Two Distinct Sites Is Required for Activation of Membrane Fusion," <i>Proc. Natl. Assoc. Sci. USA</i> 98(17):9859–9864 (2001).
Gotoh et al., "An Endoprotease Homologous to the Blood Clotting Factor X as a Determinant of Viral Tropism in Chick Embryo," EMBO Journal 9(12):4189-4195 (1990).
Heminway et al., "Role of Basic Residues in the Proteolytic Activation of Sendal Virus Fusion Glycoprotein," Virus Res. 36(1):15-35 (1995).
Homma and Ohuchi, "Trypsin Action on the Growth of Sendai Virus in Tissue Culture Cells III. Structural Difference of Sendai Viruses Grown in Eggs and Tissue Culture Cells," J. Virol. 12(6):1457-1465 (1973).
Hsu et al., "Protease Activation Mutants of Sendai Virus: Sequence Analysis of the mRNA of the Fusion Protein (F) Gene and Direct Identification of the Cleavage Activation Site," Virology 156(1):84-90 (1987).
Inoue et al., "A New Sendai Virus Vector Deficient in the Matrix Gene Does Not Form Virus Particles and Shows Extensive Cell-to-Cell Spreading," J. Virol. 77(11):6419–6429 (2003).
 Kido et al., "Isolation and Characterization of a Novel Trypsin-like Protease Found in Rat Bronchiolar Epithelial Clara Cells: A Possible Activator of the Viral Fusion Glycoprotein," J. Biol. Chem. 267(19):13573-13579 (1992).
Lamb and Kolakofsky, "Paramyxoviridae: The Viruses and Their Replication," Fields Virology, 3rd ed., B.N. Fields et al., Lippincott-Raven Publishers, Philadelphia, PA, Chapter 40:1177-1204 (1996).
 Li et al., "A Cytoplasmic RNA Vector Derived from Nontransmissible Sendai Virus with Efficient Gene Transfer and Expression," <i>J. Virol.</i> 74(14):6564-6569 (2000).
Maisner et al., "Recombinant Measles Virus Requiring an Exogenous Protease for Activation of Infectivity," J. Gen. Virol. 81(Pt2): 441-449 (2000).
Nagai, "Protease-Dependent Virus Tropism and Pathogenicity," Trends Microbiol. 1(3):81-87 (1993).
Nakayama, "Furin: A Mammalian Subtilisin/Kex2p-like Endoprotease Involved in Processing of a Wide Variety of Precursor Proteins," <i>Biochem. J.</i> 327(Pt3):625-635 (1997).

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation form with the next communication to applicant.	on if not in conformance and not considered. Include copy of this

SUBSTITUTE FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE	Attorney Docket No.	50026/061001
(MODIFIED)	PATENT AND TRADEMARK OFFICE	Serial No.	10/587,123
		Applicant	inoue et al.
STATEMEN	ON DISCLOSURE T BY APPLICANT	Filing Date	July 24, 2006
(Use several sheets if necessary)		Group	1645
(37 C.F.R. § 1.98(b))		IDS Filed	February 14, 2007

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)
Peng et al., "A Gene Delivery System Activatable by Disease-Associated Matrix Metalloproteinases," Hum. Gene Ther. 8(6):729-738 (1997).
Steiner et al., "The New Enzymology of Precursor Processing Endoproteases," J. Biol. Chem. 267(33):23435-23438 (1992).
Walker et al., "Sequence Specificity of Furin, a Proprotein-Processing Endoprotease, for the Hemagglutinin of a Virulent Avian Influenza Virus," J. Virol. 68(2):1213-1218 (1994).
Zimmer et al., "Proteolytic Activation of Respiratory Syncytial Virus Fusion Protein: Cleavage at Two Furin Consensus Sequences," J. Biol. Chem. 276(34):31642–31650 (2001).
Zimmer et al., "Cleavage at the Furin Consensus Sequence RAR/KR ¹⁰⁰ and Presence of the Intervening Peptide of the Respiratory Syncytial Virus Fusion Protein Are Dispensable for Virus Replication in Cell Culture," <i>J. Virol.</i> 76(18):9218-9224 (2002).
International Search Report for PCT/JP2005/000708, mailed March 15, 2005.
European Search Report for EP 05703936, mailed January 10, 2007.

EXAMINER	DATE CONSIDERED